

REMARKS

Upon entry of the present amendment, claims 27-40 will have been amended to clarify the recitations thereof. No claims will have been canceled and no claims will have been added by the present response.

In view of the herein contained amendments and remarks, Applicants respectfully request reconsideration and withdrawal of the outstanding rejection, together with an indication of the allowability of all of the claims pending herein, in due course. Such action is now believed to be appropriate and proper and is thus respectfully requested.

Initially, Applicants respectfully thank the Examiner for explicitly indicating the acceptance of the drawings filed the present application on July 20, 2006.

In addition, Applicants respectfully thank the Examiner for acknowledging their claim for foreign priority under 35 U.S.C. § 119 as well as for confirming that the certified copy of the priority document has been received. In this regard, since the present application is a national phase application filed under 35 U.S.C. § 371, Applicants assume that the certified copy of the foreign priority document was forwarded to the U.S. Patent and Trademark Office by the International Bureau.

Applicants additionally respectfully thank the Examiner for explicitly indicating his consideration of each of the documents cited in the Information Disclosure Statements filed in the present application on December 6, 2005, June 1, 2007 and December 27, 2007 (it is assumed that December 17, 2007 was intended) by the return of appropriately annotated copies of the PTO-1449 Forms attached to each of the above noted Information Disclosure Statements.

In this regard, Applicants note that on the PTO-1449 Forms associated with the Information Disclosure Statements of June 1, 2007 and December 17, 2007, the Examiner did not initial the English language abstracts listed thereon. It is assumed that the failure to initial these properly cited documents merely represents an inadvertent oversight on the part of the Examiner since the underlying Japanese and Chinese language documents were initialed by the Examiner to indicate their consideration. Nevertheless, Applicants respectfully request, in order to complete and clarify the record of the present application, that the Examiner, in the next Official Action in the present application, explicitly indicate his consideration of the English language abstracts for the JP 9 -- 319632 and for CN 1336059. Such action would be sincerely appreciated by Applicants and would serve to enhance the clarity of the record of the present application.

In the outstanding Official Action, the Examiner rejected all of pending claims 27-40 under 35 U.S.C. § 102(e) as being anticipated by ZHANG et al. (U.S. Patent Application Publication No. 2005/0088972).

Applicants respectfully traverse the above noted rejection and submit that it is inappropriate and improper with respect to the combination of features recited in the claims of the present application. In particular, Applicants respectfully submit that the ZHANG et al. document relied upon by the Examiner as the sole evidentiary basis for the rejection of all of the claims in the present application does not contain a disclosure that is adequate or sufficient to either anticipate or even to render obvious the combinations of features recited in each of Applicants' claims. Accordingly, Applicants respectfully request reconsideration and withdrawal of the outstanding rejection, together with an indication of the allowability of all the claims pending herein, in due course

The present invention is directed to a method for broadcasting content, a method for receiving content, a transmission apparatus, a reception apparatus and a broadcast system, as defined by the respective pending independent claims. Utilizing the combination of features recited in pending claim 27 as a nonlimiting example of Applicants' invention, an aspect of the present invention is directed to a method for broadcasting content to a plurality of mobile terminals. The method includes storing content, and a plurality of pieces of program configuration information, the program configuration information including a screen arrangement of the content, and broadcasting the content and the plurality of pieces of program configuration information to the plurality of mobile terminals. Further, in the storing of the content, the plurality of pieces of program configuration information are associated with respective bands, so that the plurality of mobile terminals each select one of the plurality of pieces of program configuring information, based on a transmission condition.

At least this combination of features is not disclosed, taught, suggested, or rendered obvious by the ZHANG et al. disclosure relied upon by the Examiner in the outstanding rejection. ZHANG et al. relates to controlling a transmission window size, wherein a transmission condition of the transmission path between a transmitting element and a receiving element is checked when at least one of the transmitting and receiving elements moves from a first access network to a second access network. The transmission window size is changed in response to the result of the checking, so that the transmission window can be actively decreased to accelerate the control procedure and improve resource utilization.

Thus, the problem that ZHANG et al. sets out to solve and the object of the ZHANG et al. invention is to provide an apparatus and method for improving an adaptation speed of a TCP connection in an instable network environment [0015]. The transmission control protocol (TCP)

communications scheme is based upon a connection type transmission in which a communication connection is first established between terminals and thereafter the terminals begin communicating over the established connection.

Since, as noted above, ZHANG et al. relates to adjusting the window size based on a result of a checking of a transmission condition between the transmitting element and a receiving element, ZHANG et al. is premised upon and relates to two-way communication (figure 3). Accordingly, the objects and the problems to which the present invention and to which ZHANG et al. are directed are quite distinct. In other words, since ZHANG et al. relates to two-way communication while the present invention relates to one-way communication (i.e. broadcasting), the structural and functional configurations of ZHANG et al. and of the present invention are distinct if not remote from each other.

In contrast to the above, the present invention, based on the disclosure related to the features of claim 27 is directed to a transmission method for broadcasting and is directed to solving problems that are most particularly relevant to one way broadcasting communication by, for example allowing receiving terminals in different propagation environments and receiving terminals having different display capabilities to be able to display multimedia contents in screen configurations that correlate and match the respective propagation environments and the respective display capabilities of the different receiving terminals. As nonlimiting examples of different propagation environments, different transmission bands and packet loss rates are included. As a nonlimiting example of different display capabilities, different screen sizes are included.

In accordance with a feature of the present invention, a plurality of pieces of program configuration information, which includes band information, is transmitted together with content

from the server (i.e. the transmitting device) and at the receiving device, program configuration information that matches the appropriate band is selected, based on a transmission condition. Thus, the content is displayed based upon the program configuration information that was transmitted together with the content.

In other words, the transmitting apparatus transmits, by a one-way broadcasting transmission, both the content and a plurality of pieces of program configuration information to the receiving terminals. The transmitted content and plurality of pieces of program configuration information can then be processed by the receiving apparatus or terminal at the discretion of the receiving apparatus. In this fashion, the present invention enable appropriate (or adequate) program configuration information, from a plurality of pieces of program configuration information, to be selected at the receiving terminal based upon the environment (i.e. the transmission condition) and displaying the content in a manner that is appropriate for each respective receiving apparatus or terminal.

In contrast with this aspect of the present invention, according to the disclosure of ZHANG et al., based on handover signaling from the network 20, a mobile node or terminal 1 determines various transmission conditions or parameters, such as bandwidth, delay, buffer size, and the like of the access network 20 and adjusts a TCP transmission window size to match the changed conditions. In this regard, the Examiner's attention is respectfully directed to paragraph [0040] of ZHANG et al. Further, according to the disclosure of ZHANG et al., by adjusting the window size in accordance with the transmission condition parameters, the amount of data that the transmitter (i.e. the mobile terminal 1) can transmit to the various communicating parties is controlled. However, the ZHANG et al. TCP window transmission size bears no relationship to

the screen arrangement of the content that is included in the program configuration information and that is selected based on a transmission condition, as recited in Applicants' claims.

According to the present invention and in accordance with a particular feature thereof, an appropriate program configuration is selected from a plurality of pieces of program configuration information by the receiving terminal apparatus based on the environment, and the content is displayed in a manner that is appropriate to each receiving terminal apparatus. In direct contrast, in ZHANG et al., direct control of the amount of data from the perspective of the receiving terminal or apparatus is not possible. Rather, it is necessary control the data (i.e. the amount or speed) through the transmitting terminal alone. In this regard the Examiner's attention is respectfully directed to the signaling diagram of figure 3 and the utilization of the various acknowledgments ACK utilized for this purpose.

Moreover, ZHANG et al. contains no disclosure of transmitting, to a receiving terminal, a plurality of pieces of program configuration information that include screen arrangement of content, together with the content. In particular, ZHANG et al. does not disclose transmitting a plurality of pieces of program configuration information to the receiving terminals and selecting program configuration information that is associated with an adequate or appropriate transmission band from the plurality of pieces of program configuration information, at the receiving terminal, based on a transmission condition, as now even more clearly recited in the respective claimed combinations.

Accordingly, Applicants respectfully request reconsideration and withdrawal of the outstanding rejection, together with an indication of the allowability of all the claims pending in the present application, in view of the herein contained amendments and remarks.

SUMMARY AND CONCLUSION

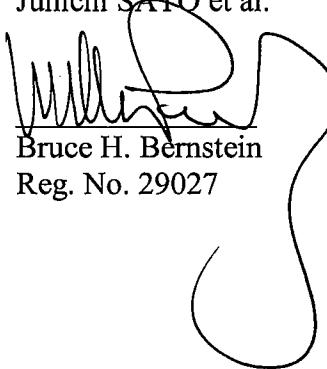
Applicants have made a sincere effort to place the present application in condition for allowance and believe that they have now done so. Applicants have amended each of the claims in order to enhance the clarity of the language thereof and to more clearly emphasize significant features of Applicants' disclosed invention.

Applicants have discussed the disclosure of the relied upon reference and have contrasted the same with the features of Applicants' invention. Applicants have additionally discuss the explicit recitations of the pending claims and have noted the shortcomings of the disclosure of the reference with respect to the claim language, which defines various aspects and features of the present invention. Accordingly, Applicants have provided a clear evidentiary basis supporting the patentability of all the claims in the present application and respectfully request an indication to such effect in due course.

Any amendments to the claims which have been made in this amendment, and which have not been specifically noted to overcome a rejection based upon the prior art, should be considered to have been made for a purpose unrelated to patentability, and no estoppel should be deemed to attach thereto.

Should the Examiner have any questions or comments regarding this Response, or the present application, the Examiner is invited to contact the undersigned at the below-listed telephone number.

Respectfully Submitted,
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